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TECH CENTER 1600/2800



1600

RAW SEQUENCE LISTING

DATE: 06/26/2003

PATENT APPLICATION: US/09/870,379A

TIME: 13:06:19

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\06262003\I870379A.raw

4 <110> APPLICANT: Donald L. Durden
 5 ADVANCED RESEARCH & TECHNOLOGY INSTITUTE
 7 <120> TITLE OF INVENTION: Compositions and Methods for Identifying
 8 Agents Which Modulate PTEN Function and PI-3 Kinase
 9 Pathways
 12 <130> FILE REFERENCE: 1857-PO2575US1
 14 <140> CURRENT APPLICATION NUMBER: 09/870,379A
 15 <141> CURRENT FILING DATE: 2001-05-30
 17 <150> PRIOR APPLICATION NUMBER: 60/274,167
 18 <151> PRIOR FILING DATE: 2001-03-08
 20 <150> PRIOR APPLICATION NUMBER: 60/208,437
 21 <151> PRIOR FILING DATE: 2000-05-30
 23 <160> NUMBER OF SEQ ID NOS: 23
 25 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 1260
 30 <212> TYPE: DNA
 31 <213> ORGANISM: Homo sapiens
 33 <400> SEQUENCE: 1
 34 cttctgccat ctctctcttc ctttttcttc agccacaggc tcccagacat gacagccatc 60
 35 atcaaagaga tcgttagcag aaacaaaagg agatatcaag aggatggatt cgacttagac 120
 36 ttgacctata tttatccaaa tattattgct atgggatttc ctgcagaaag acttgaaggt 180
 37 gtatacagga acaatattga tgatgtagta aggttttttg attcaaagca taaaaaccat 240
 38 tacaagatat acaatctatg tgctgagaga cattatgaca ccgccaaatt taactgcaga 300
 39 gttgcacagt atccttttga agaccataac ccaccacagc tagaacttat caaaccttct 360
 40 tgtgaagatc ttgaccaatg gctaagtga gatgacaatc atgttgcagc aattcactgt 420
 41 aaagctggaa agggacggac tgggtgaatg atttgtgcat atttattgca tcggggcaaa 480
 42 tttttaaagg cacaagaggc cctagatttt tatggggaag taaggaccag agacaaaaag 540
 43 ggagtcacaa ttcccagtcg gaggcgctat gtatattatt atagctacct gctaaaaaat 600
 44 cacctggatt acagaccgct ggcactgctg tttcacaaga tgatgtttga aactattcca 660
 45 atgttcagtg gcggaacttg caatcctcag tttgtggtct gccagctaaa ggtgaagata 720
 46 tattcctcca attcaggacc cagcggcggg gaggacaagt tcatgtactt tgagttccct 780
 47 cagccattgc ctgtgtgtgg tgatatcaaa gtagagttct tccacaaaca gaacaagatg 840
 48 ctcaaaaagg acaaaatggt tcacttttgg gtaaatacgt tcttcatacc aggaccagag 900
 49 gaaacctcag aaaaagtga aaatggaagt ctttgtgatc aggaaatcga tagcatttgc 960
 50 agtatagagc gtgcagataa tgacaaggag tatcttgtac tcaccctaac aaaaacgat 1020
 51 cttgacaaaag caaacaaga caaggccaac cgatacttct ctccaaattt taaggtgaaa 1080
 52 ctatacttta caaaaacagt agaggagcca tcaaattccag aggctagcag ttcaacttct 1140
 53 gtgactccag atgttagtga caatgaacct gatcattata gatattctga caccactgac 1200
 54 tctgatccag agaatgaacc ttttgatgaa gatcagcatt cacaattac aaaagtctga 1260
 57 <210> SEQ ID NO: 2
 58 <211> LENGTH: 403
 59 <212> TYPE: PRT

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60 <213> ORGANISM: Homo sapiens

62 <400> SEQUENCE: 2

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63 Met Thr Ala Ile Ile Lys Glu Ile Val Ser Arg Asn Lys Arg Arg Tyr
64 1 5 10 15
65 Gln Glu Asp Gly Phe Asp Leu Asp Leu Thr Tyr Ile Tyr Pro Asn Ile
66 20 25 30
67 Ile Ala Met Gly Phe Pro Ala Glu Arg Leu Glu Gly Val Tyr Arg Asn
68 35 40 45
69 Asn Ile Asp Asp Val Val Arg Phe Leu Asp Ser Lys His Lys Asn His
70 50 55 60
71 Tyr Lys Ile Tyr Asn Leu Cys Ala Glu Arg His Tyr Asp Thr Ala Lys
72 65 70 75 80
73 Phe Asn Cys Arg Val Ala Gln Tyr Pro Phe Glu Asp His Asn Pro Pro
74 85 90 95
75 Gln Leu Glu Leu Ile Lys Pro Phe Cys Glu Asp Leu Asp Gln Trp Leu
76 100 105 110
77 Ser Glu Asp Asp Asn His Val Ala Ala Ile His Cys Lys Ala Gly Lys
78 115 120 125
79 Gly Arg Thr Gly Val Met Ile Cys Ala Tyr Leu Leu His Arg Gly Lys
80 130 135 140
81 Phe Leu Lys Ala Gln Glu Ala Leu Asp Phe Tyr Gly Glu Val Arg Thr
82 145 150 155 160
83 Arg Asp Lys Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr
84 165 170 175
85 Tyr Tyr Ser Tyr Leu Leu Lys Asn His Leu Asp Tyr Arg Pro Val Ala
86 180 185 190
87 Leu Leu Phe His Lys Met Met Phe Glu Thr Ile Pro Met Phe Ser Gly
88 195 200 205
89 Gly Thr Cys Asn Pro Gln Phe Val Val Cys Gln Leu Lys Val Lys Ile
90 210 215 220
91 Tyr Ser Ser Asn Ser Gly Pro Thr Arg Arg Glu Asp Lys Phe Met Tyr
92 225 230 235 240
93 Phe Glu Phe Pro Gln Pro Leu Pro Val Cys Gly Asp Ile Lys Val Glu
94 245 250 255
95 Phe Phe His Lys Gln Asn Lys Met Leu Lys Lys Asp Lys Met Phe His
96 260 265 270
97 Phe Trp Val Asn Thr Phe Phe Ile Pro Gly Pro Glu Glu Thr Ser Glu
98 275 280 285
99 Lys Val Glu Asn Gly Ser Leu Cys Asp Gln Glu Ile Asp Ser Ile Cys
100 290 295 300
101 Ser Ile Glu Arg Ala Asp Asn Asp Lys Glu Tyr Leu Val Leu Thr Leu
102 305 310 315 320
103 Thr Lys Asn Asp Leu Asp Lys Ala Asn Lys Asp Lys Ala Asn Arg Tyr
104 325 330 335
105 Phe Ser Pro Asn Phe Lys Val Lys Leu Tyr Phe Thr Lys Thr Val Glu
106 340 345 350
107 Glu Pro Ser Asn Pro Glu Ala Ser Ser Ser Thr Ser Val Thr Pro Asp
108 355 360 365
109 Val Ser Asp Asn Glu Pro Asp His Tyr Arg Tyr Ser Asp Thr Thr Asp

```

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110 370 375 380
 111 Ser Asp Pro Glu Asn Glu Pro Phe Asp Glu Asp Gln His Ser Gln Ile
 112 385 390 395 400

113 Thr Lys Val

116 <210> SEQ ID NO: 3

117 <211> LENGTH: 9

118 <212> TYPE: PRT

119 <213> ORGANISM: Homo sapiens

121 <400> SEQUENCE: 3

122 Asp Leu Asp Leu Thr Tyr Ile Tyr Pro

123 1 5

126 <210> SEQ ID NO: 4

127 <211> LENGTH: 4

128 <212> TYPE: PRT

129 <213> ORGANISM: Homo sapiens

131 <220> FEATURE:

132 <221> NAME/KEY: misc_feature

133 <222> LOCATION: (2)...(3)

134 <223> OTHER INFORMATION: Xaa = Any amino acid

136 <400> SEQUENCE: 4

W--> 137 Tyr Xaa Xaa Pro

138 1

141 <210> SEQ ID NO: 5

142 <211> LENGTH: 5

143 <212> TYPE: PRT

144 <213> ORGANISM: Homo sapiens

146 <400> SEQUENCE: 5

147 Tyr Phe Ser Pro Asn

148 1 5

151 <210> SEQ ID NO: 6

152 <211> LENGTH: 6

153 <212> TYPE: PRT

154 <213> ORGANISM: Homo sapiens

156 <400> SEQUENCE: 6

157 Tyr Leu Val Leu Thr Leu

158 1 5

161 <210> SEQ ID NO: 7

162 <211> LENGTH: 4

163 <212> TYPE: PRT

164 <213> ORGANISM: Homo sapiens

166 <400> SEQUENCE: 7

167 Tyr Ser Tyr Leu

168 1

171 <210> SEQ ID NO: 8

172 <211> LENGTH: 7

173 <212> TYPE: PRT

174 <213> ORGANISM: Homo sapiens

176 <400> SEQUENCE: 8

177 Tyr Arg Asn Asn Ile Asp Asp

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Input Set : A:\PTO.AMC.txt

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```

178      1              5
181 <210> SEQ ID NO: 9
182 <211> LENGTH: 8
183 <212> TYPE: PRT
184 <213> ORGANISM: Homo sapiens
186 <400> SEQUENCE: 9
187   His Cys Lys Ala Gly Lys Gly Arg
188      1              5
191 <210> SEQ ID NO: 10
192 <211> LENGTH: 6
193 <212> TYPE: PRT
194 <213> ORGANISM: Homo sapiens
196 <400> SEQUENCE: 10
197   Asp His Asn Pro Pro Gln
198      1              5
201 <210> SEQ ID NO: 11
202 <211> LENGTH: 9
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo sapiens
206 <400> SEQUENCE: 11
207   His Phe Trp Val Asn Thr Phe Phe Ile
208      1              5
211 <210> SEQ ID NO: 12
212 <211> LENGTH: 13
213 <212> TYPE: PRT
214 <213> ORGANISM: Homo sapiens
216 <400> SEQUENCE: 12
217   Thr Leu Thr Lys Asn Asp Leu Asp Phe Thr Lys Thr Val
218      1              5              10
221 <210> SEQ ID NO: 13
222 <211> LENGTH: 12
223 <212> TYPE: PRT
224 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 13
227   Gly Asp Ile Lys Val Glu Phe Phe Thr Lys Thr Val
228      1              5              10
231 <210> SEQ ID NO: 14
232 <211> LENGTH: 14
233 <212> TYPE: PRT
234 <213> ORGANISM: Homo sapiens
236 <400> SEQUENCE: 14
237   Asp Lys Ala Asn Lys Asp Lys Ala Asn Phe Thr Lys Thr Val
238      1              5              10
241 <210> SEQ ID NO: 15
242 <211> LENGTH: 19
243 <212> TYPE: PRT
244 <213> ORGANISM: Homo sapiens
246 <400> SEQUENCE: 15
247   Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr Val Tyr Tyr Tyr Ser

```

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```

248      1              5              10              15
249    Tyr Leu Leu
252 <210> SEQ ID NO: 16
253 <211> LENGTH: 8
254 <212> TYPE: PRT
255 <213> ORGANISM: Homo sapiens
257 <400> SEQUENCE: 16
258    Arg Tyr Ser Asp Thr Thr Asp Ser
259      1              5
-----
262 <210> SEQ ID NO: 17
263 <211> LENGTH: 11
264 <212> TYPE: PRT
265 <213> ORGANISM: Homo sapiens
267 <400> SEQUENCE: 17
268    Lys Gly Val Thr Ile Pro Ser Gln Arg Arg Tyr
269      1              5              10
272 <210> SEQ ID NO: 18
273 <211> LENGTH: 7
274 <212> TYPE: PRT
275 <213> ORGANISM: Homo sapiens
277 <400> SEQUENCE: 18
278    His Thr Gln Ile Thr Lys Val
279      1              5
282 <210> SEQ ID NO: 19
283 <211> LENGTH: 29
284 <212> TYPE: DNA
285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Primer
290 <400> SEQUENCE: 19
291    ggggtccacat gacagccatc atcaaagag                29
294 <210> SEQ ID NO: 20
295 <211> LENGTH: 29
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Primer
302 <400> SEQUENCE: 20
303    ggtctagatc agacttttgt aatttgtga                29
306 <210> SEQ ID NO: 21
307 <211> LENGTH: 4
308 <212> TYPE: PRT
309 <213> ORGANISM: Homo sapiens
311 <220> FEATURE:
312 <221> NAME/KEY: misc_feature
313 <222> LOCATION: (2)...(3)
314 <223> OTHER INFORMATION: Xaa = Any amino acid
316 <400> SEQUENCE: 21
W--> 317    Tyr Xaa Xaa Met

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/870,379A

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Input Set : A:\PTO.AMC.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:4; Xaa Pos. 2,3
Seq#:21; Xaa Pos. 2,3
Seq#:22; Xaa Pos. 3,4,5,6,7
Seq#:23; Xaa Pos. 3,4,5,6